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EXAMINER	
PEACHES, RANDY	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/986,698	Applicant(s) ZHANG, JUNBIAO	
	Examiner Randy Peaches	Art Unit 2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. ***Claims 1-5*** are rejected under 35 U.S.C. 102(e) as being anticipated by Erekson (U.S. Patent Number 6,622,018 B1).

Regarding ***claim 1***, Erekson discloses a method for extending one or more capabilities of a portable computer system (PCS, 100), which reads on claimed "handheld device," comprising:

- said PCS (100) detecting a remote device (RD, 610, 620, 630), which reads on claimed "helper device," , see FIGURE 6, that provides at least one resource, i.e. television, stereo, etc. See column 1 lines 25-30;
- determining whether said RD (610, 620, 630) provides a selected one of said at least one resource, said compliant devices offering at least one resource, which reads on claimed "selected one of said at least one resource being selected to extend said one or more," capability of said PCS (100), said PCS (100) being

capable of independent operation and said RD (610, 620, 630) being configured to control access, i.e. on/off, to the selected resource. See column 8 lines 33-64;

- said PCS (100) requesting the selected resource from said RD (610, 620, 630). See column 8 lines 50-55;
- transferring data to said RD (610, 620, 630) from said PCS (100) in accordance with said RD (610, 620, 630) granting said PCS (100) access to the selected resource. See column 9 lines 25-40 and column 10 lines 1-10;
- said RD (610, 620, 630) using the selected resource to process the transferred data(see column 2 lines 31-40);
    - wherein the selected resource is not adequately provided by said independent operation of said PCS (100). See column 2 lines 17-31, and
    - whereby said one or more capabilities, i.e. use of the stylus (column 2 lines 32-36) of said PCS (100) are extended through the operation of the selected resource of said RD (610, 620, 630). See column 2 lines 41-50.

Regarding ***claim 2***, according to ***claim 1***, Erekson further discloses in column 8 lines 42-64, wherein when the said RD (610, 620, 630) has not been selected as a "compliant", device will the said RD (610, 620, 630) deny access to the said PCS (100).

Regarding ***claim 3***, according to ***claim 1***, Erekson further discloses a method for extending one or more capabilities of a PCS (100) comprising:

- the operation of the selected resource on said data is controlled by said PCS (100). See column 8 lines 58-64.

Regarding ***claim 4***, according to ***claim 1***, Erekson further discloses a method for extending one or more capabilities of a PCS (100) comprising:

- said RD (610, 620, 630) sending characterization information, which reads on claimed "interface description," to said PCS (100). See column 8 lines 50-60;
- said PCS (100) constructing and displaying an icon, which reads on claimed "control interface," from said interface description. See column 9 lines 10-24;
- said PCS (100) transferring a processed user interaction with said control interface to said RD (610, 620, 630). See column 8 lines 56-64 and column 9 lines 25-40, and
- said RD (610, 620, 630) interpreting the user interaction based on said selected resource. See column 9 lines 34-40;
    - wherein said PCS (100) operating said RD (610, 620, 630) based on said i.e. use of the stylus (column 2 lines 32-36), and
    - whereby new resources can be added or existing resources can be modified without requiring modifications on said RD (610, 620, 630). See column 10 lines 48-64 and column 11 lines 33-49.

Regarding ***claim 5,*** according to ***claim 1***, Erekson further discloses in a Link Management Protocol (LMP) utilized to report information, as disclosed in column 7 lines 56-63. Said information is used by the said PCS (100) to execute a command, i.e. on/off, of the said remote device.

2. ***Claims 22-31*** are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta (U.S. Publication Number 2001/0029531 A1).

Regarding ***claim 22***, Ohta discloses a system for extending one or more capabilities of a portable digital device (11), comprising:

- a client device (14)i.e. computer/workstation or PDA, which reads on claimed "first means," for accessing at least one resource. See paragraph [0037];
- a print server (13) in conjunction with a print stations (12a, 12b, 12c), which reads on claimed "second means," for controlling access to said at least one resource. See paragraph [0037];
- an access point (16), which reads on claimed "third means," for communicating between said print stations (12a, 12b, 12c) and said print server (13). See paragraph [0037];
    - wherein said client device (14) uses said access point (16) to determine whether said print server (13) in conjunction with a print stations (12a, 12b, 12c), is capable of providing a selected one of said at least one resource to said client device (14). See paragraph [0055-0056];
    - wherein said client device (14) uses said access point (16) to request said selected resource from said print server (13) in conjunction with a print stations (12a, 12b, 12c)(see paragraph [0037]), said print server (13) in conjunction with a print stations (12a, 12b, 12c), queuing the request if said selected resource is temporarily unavailable. See paragraph [0037];

- when said selected resource becomes available to said print server (13) in conjunction with a print stations (12a, 12b, 12c), said print server (13) in conjunction with print stations (12a, 12b, 12c), grants said client device (14) access to said selected resource, and any other queued requests for said selected resource from said client device (14) are ignored. See paragraphs [0037-0038];

- wherein said client device (14) uses said access point (16) to transfer data to said print server (13) in conjunction with a print stations (12a, 12b, 12c) in accordance with said print server (13) in conjunction with a print stations (12a, 12b, 12c) granting said client device (14) access to said selected resource. See paragraph [0037];
- wherein said print server (13) in conjunction with a print stations (12a, 12b, 12c) uses said selected resource to process said data. See paragraph [0037];
- wherein said client device (14) is mobile and capable of independent operation. See paragraph [0003];
- wherein said selected resource is not adequately provided by said independent operation of said client device (14), and whereby said one or more capabilities of said client device (14) is extended through the operation of the selected resource of said print server (13) in conjunction with a print stations (12a, 12b, 12c). See paragraph [0040].

Regarding ***claim 23***, according to ***claim 22***, Ohta further discloses wherein the operation of said resource on said data is controlled by said client device (14) using said access point (16). See paragraphs [0037 and 0052]

Regarding ***claim 24***, according to ***claim 22***, Ohta further discloses wherein:

- said print server (13) in conjunction with a print stations (12a, 12b, 12c) uses said access point (16) to send an interface description to said client device (14); See paragraph [0039]
- said client device (14) constructs and displays a control interface from said interface description. See paragraph [0039];
- said client device (14) uses said third means to transfer a user interaction with said control interface to said print server (13) in conjunction with a print stations (12a, 12b, 12c). See paragraph [0039-0040], and
- said print server (13) in conjunction with a print stations (12a, 12b, 12c) interprets the user interaction based on said selected resource. See paragraph [0041] ;
- wherein said client device (14) uses said access point (16) to operate said print server (13) in conjunction with a print stations (12a, 12b, 12c) based on said user interaction. See paragraph [0037], and

Regarding ***claim 25***, according to ***claim 24***, Ohta further discloses in paragraphs [0037,0051,0066] wherein, said information is specified in a printer driver/description language (PDL), which reads on claimed "markup language."

Regarding ***claim 26***, according to ***claim 24***, Ohta further discloses in paragraphs [0039] wherein the request for said resource includes capability information associated with said client device (14), and wherein said capability information is used by said print server (13) in conjunction with a print stations (12a, 12b, 12c)to determine the appropriate interface description to send to said client device (14).

Regarding ***claim 27***, according to ***claim 24***, Ohta further discloses in paragraphs [0044-0047] wherein the request for said resource from said client device (14) includes the type of data to be transferred and the size of said data.

Regarding ***claims 28 and 29***, according to ***claim 22***, further disclosed by Ohta wherein said data transferred from said consists of a URL. See paragraph [0041].

Regarding ***claims 30 and 31***, according to ***claim 22***, further disclosed by Ohta wherein a client device (14), i.e. computer/work station, which reads on claimed "client," is used for communication. The said client device (14) being activated on demand, which reads on claimed "daemon," when a user interacts with the said device. See paragraph [0037].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. ***Claims 6-15, 17-20*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Erekson (U.S. Patent Number 6,622,018 B1) in view of Ohta (U.S. Publication Number 2001/0029531 A1).

Regarding ***claims 6 and 11***, Erekson discloses a method for extending one or more capabilities of a portable computer system (PCS, 100), which reads on claimed "handheld device," comprising:

- said PCS (100) detecting a plurality of remote device (RD, 610, 620, 630) (column 2 lines 9-11), which reads on claimed "helper device," see FIGURE 6, that provides at least one resource, i.e. television, stereo, etc. See column 1 lines 25-30;
- determining whether said RD (610, 620, 630) provides a selected one of said at least one resource, said compliant devices offering at least one resource, which reads on claimed "selected one of said at least one resource being selected to extend said one or more," capability of said PCS (100), said PCS (100) being

capable of independent operation and said RD (610, 620, 630) being configured to control access, i.e. on/off, to the selected resource. See column 8 lines 33-64;

- said PCS (100) requesting the selected resource from said RD (610, 620, 630). See column 8 lines 50-55;
- transferring data to said RD (610, 620, 630) from said PCS (100) in accordance with said RD (610, 620, 630) granting said PCS (100) access to the selected resource. See column 9 lines 25-40 and column 10 lines 1-10;
- said RD (610, 620, 630) using the selected resource to process the transferred data(see column 2 lines 31-40);
    - wherein the selected resource is not adequately provided by said independent operation of said PCS (100). See column 2 lines 17-31, and
    - whereby said one or more capabilities, i.e. use of the stylus (column 2 lines 32-36) of said PCS (100) are extended through the operation of the selected resource of said RD (610, 620, 630). See column 2 lines 41-50.

However, Erekson fails to disclose wherein when the selected resource becomes available to one of said RD (610, 620, 630) having queued the request, said one of said RD (610, 620, 630) granting said PCS (100) access to said resource and ignoring all queued requests for said resource in other said RD (610, 620, 630) having queued the request; additionally, wherein all requests for the selected resource, in other helper devices having queued the request from said handheld device, are ignored.

Ohta teaches of a system where a request is sent to a set of printers, which reads on claimed "helper devices," which is controlled by a printer server. When the

selected printer becomes available to the said printer server, request is fulfilled. Therefore, ignoring the previously transmitted requests to the other said printers; thus ignoring the queued requests. See paragraph [0076].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to eliminate excess storage of queued information that is to be processed by a said remote device when the said device becomes available.

Regarding ***claim 7***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 6***, Ohta continues to further disclose in paragraph [0076] wherein the communication between said PCS (100) and said one of said RD (610, 620, 630) of step (e) is broken before said PCS (100) has completed use of the selected resource, returning to step (a).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to retransmit a request when it is determined that a failure occurred prior to the completion of the request. This function is applicable to assure the said request is granted and the process complete, regardless of errors that may occur.

Regarding ***claims 8 and 12***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claims 6, 11***, Erekson further discloses a method for extending one or more capabilities of a PCS (100) comprising:

- the operation of the selected resource on said data is controlled by said PCS (100). See column 8 lines 58-64.

Regarding ***claims 9 and 13***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claims 6, 11***, Erekson further discloses a method for extending one or more capabilities of a PCS (100) comprising:

- said RD (610, 620, 630) sending characterization information, which reads on claimed "interface description," to said PCS (100). See column 8 lines 50-60;
- said PCS (100) constructing and displaying an icon, which reads on claimed "control interface," from said interface description. See column 9 lines 10-24;
- said RD (610, 620, 630) interpreting the user interaction based on said selected resource. See column 9 lines 34-40;
- said PCS (100) transferring a processed user interaction with said control interface to said RD (610, 620, 630). See column 8 lines 56-64 and column 9 lines 25-40, and 9.
    - wherein said PCS (100) operating said RD (610, 620, 630) based on said i.e. use of the stylus (column 2 lines 32-36), and

- whereby new resources can be added or existing resources can be modified without requiring modifications on said RD (610, 620, 630). See column 10 lines 48-64 and column 11 lines 33-49.

Regarding ***claims 10 and 21***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 6 and 11***, Erekson further teaches of a Link Management Protocol (LMP) utilized to report information, as disclosed in column 7 lines 56-63. Said information is used by the said PCS (100) to execute a command, i.e. on/off, of the said remote device.

Regarding ***claim 14***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 13***, further discloses by Ohta in paragraphs [0037,0051,0066] wherein, said information is specified in a printer driver/description language (PDL), which reads on claimed "markup language."

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to provide a means of sending information to a said helper device via a language capable of being traversed over the Internet.

Regarding ***claim 15***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 11***, further disclosed by Ohta in paragraph [0046], of a disk unit (24), which reads on claimed "storage device," for storing application information, which reads on claimed "service information."

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to provide a means for storing program information utilized to communicate with the said remote devices.

Regarding ***claims 17 and 18***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 11***, further disclosed by Ohta wherein said data transferred from said consists of a URL. See paragraph [0041].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to for the said PCS to have the capability to communicate to a said remote device over the internet via a URL.

Regarding ***claims 19 and 20***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 11***, further disclosed by Ohta wherein a client device

(14), i.e. computer/work station, which reads on claimed "client," is used for communication. The said client device (14) being activated on demand, which reads on claimed "daemon," when a user interacts with the said device. See paragraph [0037].

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Erekson (U.S. Patent Number 6,622,018 B1) to include Ohta (U.S. Publication Number 2001/0029531 A1) in order to provide a static means of establishing communication with a said remote device via a wired network.

4. ***Claim 16*** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to further include Mitchell et al. (U.S. Publication Number 2002/0184496 A1).

Regarding ***claim 16***, as the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) are made, the combination according to ***claim 11***, fails to disclose a system comprising an access database for storing authentication data wherein the control of the said remote device is based on the authentication information.

Mitchell et al discloses in paragraphs [0074 and 0076], of an authentication database containing the profile information of a user. Access is granted to a said device based on the information stored in the said authentication database.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the combination of Erekson (U.S. Patent Number 6,622,018 B1) and Ohta (U.S. Publication Number 2001/0029531 A1) to further include Mitchell et al. (U.S. Publication Number 2002/0184496 A1) in order to provide a means of security to limit access of a said PCS (100). Additionally, granting permission to access a said remote device by analyzing the authentication profile stored in the authentication database.

5. ***Claim 32*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta (U.S. Publication Number 2001/0029531 A1) in view of Erekson (U.S. Patent Number 6,622,018 B1).

Regarding ***claim 32***, according to ***claim 22***, Ohta discloses a system for extending one or more capabilities of a portable digital device (11).

However, Ohta fails to disclose wherein a status report is generated of the operation of a said resource, which is further processed by a said client device (14) for further execution.

Erekson further discloses in a Link Management Protocol (LMP) utilized to report information, as disclosed in column 7 lines 56-63. Said information is used by the said PCS (100) to execute a command, i.e. on/off, of the said remote device.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Ohta (U.S. Publication Number 2001/0029531 A1) to

include Erekson (U.S. Patent Number 6,622,018 B1) in order to provide a status report to generated and provided to a said client device (14). After an evaluation of the said report, action is further taken based on information provided by the said report.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marsha D Banks-Harold

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Randy Peaches
September 30, 2004